

**PHASED UNDERWATER ARCHAEOLOGICAL INVESTIGATIONS
IN
NARRAGANSETT BAY WATERS
IN THE VICINITY OF
NAVAL EDUCATION AND TRAINING CENTER
AND THE
NAVAL UNDERSEA WARFARE CENTER
NEWPORT, RHODE ISLAND**

PHASE 1A LITERATURE SEARCH

CONTRACT N62472-97-D-1390

Prepared by

1035

**The Cultural Resource Group
Louis Berger & Associates, Inc.
Needham, Massachusetts**

Under Contract to

**The Maguire Group Connecticut, Inc.
New Britain, Connecticut**

For

**Northern Division
Naval Facilities Engineering Command
Lester, Pennsylvania**

November 1998

**PHASED UNDERWATER ARCHAEOLOGICAL INVESTIGATIONS
IN
NARRAGANSETT BAY WATERS
IN THE VICINITY OF
NAVAL EDUCATION AND TRAINING CENTER
AND THE
NAVAL UNDERSEA WARFARE CENTER
NEWPORT, RHODE ISLAND**

PHASE 1A LITERATURE SEARCH

CONTRACT N62472-97-D-1390

Prepared by

**The Cultural Resource Group
Louis Berger & Associates, Inc.
Needham, Massachusetts**

Under Contract to

**The Maguire Group Connecticut, Inc.
New Britain, Connecticut**

For

**Northern Division
Naval Facilities Engineering Command
Lester, Pennsylvania**

November 1998

Summary

This report presents the results of the literature search portion of a Phase 1A archaeological investigation conducted to determine the possible presence of National Register-eligible underwater shipwreck sites and/or other submerged historic cultural resources at three locations in Narragansett Bay waters in the vicinity of the Naval Education and Training Center and the Naval Undersea Warfare Center, Newport, Rhode Island. The three study areas, McAllister Point, Coddington Cove, and Coasters Harbor, are the subject of U.S. Navy remedial environmental investigations and cleanup.

The literature and information search included library and on-line digital library sources, government collections, and oral interviews with individuals knowledgeable in the underwater archaeology of Narragansett Bay.

Research efforts failed to find literature or information suggesting that underwater cultural resources exist in the McAllister Point or the Coasters Harbor study area, and therefore no further study or survey of these areas is necessary.

Research located two documents, the diary of Frederick Mackenzie, as cited by Abbass (1998a), and the 1781 Des Barres chart, which indicate that the British frigate HMS *Juno* was sunk in Coddington Cove on August 5, 1778. The wrecks of three other British frigates sunk along with the *Juno* in Narragansett Bay north of the project areas have been located and listed in the National Register of Historic Places.

Navy construction and dredging records pertaining to Coddington Cove indicate that large areas of the cove bottom have been filled, built upon, or extensively disturbed. These actions have destroyed the integrity of any submerged archaeological resources within those areas. Due to the possibility that the historically important wreck of the *Juno* lies within the remaining undisturbed sediments in Coddington Cove, before actions which may threaten the integrity of the site are undertaken, underwater archaeological survey will be conducted in those areas.

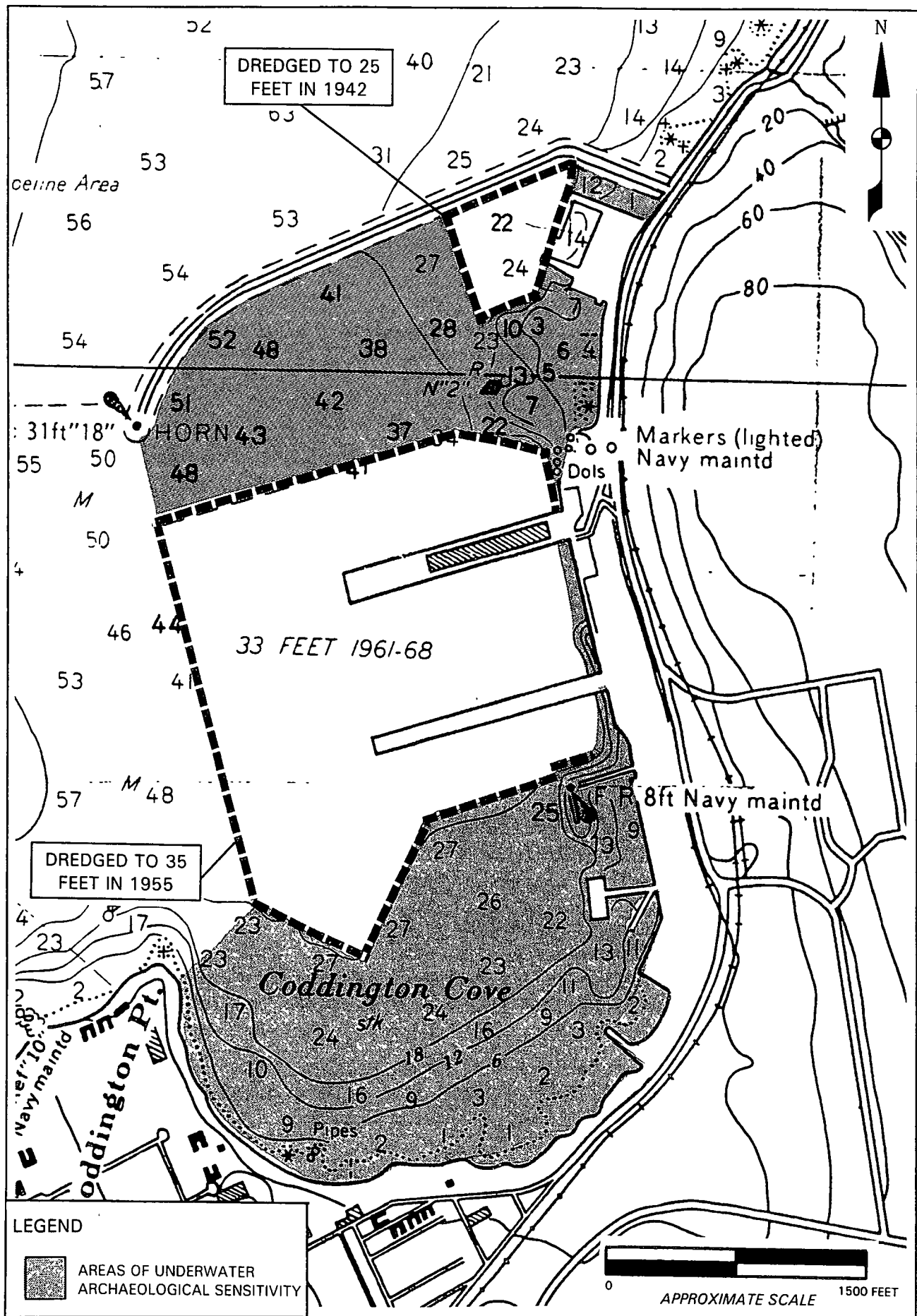


Table of Contents

	<i>Page</i>
I. Introduction	1
II. Description of Study Areas	1
III. Literature and Information Search Methods	4
IV. Discussion of Background Literature	5
V. Evaluation of Literature and Information	11
VI. Conclusions	14
VII. References Cited	15
VIII. Preparers	20
IX. Appendices	20

List of Figures

	<i>Page</i>
1. Location of Study Areas	2
2. Portion of 1781 Des Barres Map Showing the Location of the Burning and Sinking of the HMS <i>Juno</i> in Coddington Cove, Indicated by the Letter "c"	9
3. Dredged Areas of Coddington Cove	10
4. Coddington Cove, Historic and Modern Shorelines Compared, Showing Location of Wreck of the HMS <i>Juno</i> Based on 1781 Map	13

I. Introduction

The objective of this report was to compile the results of the literature search portion of a Phase 1A archaeological investigation to determine the possible presence of National Register-eligible underwater shipwreck sites and/or other submerged historic cultural resources at three locations in Narragansett Bay waters in the vicinity of the Naval Education and Training Center and the Naval Undersea Warfare Center, Newport, Rhode Island. The three study areas, McAllister Point, Coddington Cove, and Coasters Harbor (north of Coasters Harbor Island), are the subject of U.S. Navy remedial environmental investigations and cleanup actions. All three sites are located along the western shore of Aquidneck Island, north of the city of Newport. In accordance with Section 110 of the Historic Preservation Act of 1966; Executive Order 11593; and OPNAVINST 5090.1B, Environmental and Natural Resources Program Manual, the Navy must determine if National Register-eligible resources are present that may be affected by future remedial investigations or actions.

II. Description of Study Areas

A. McAllister Point

McAllister Point, the northernmost of the three study areas, forms to its south a cove historically known as Weavers Cove (Figure 1). The point and cove are the site of an 11.5-acre sanitary waste landfill used by the U.S. Navy between 1955 and the mid-1970s. Filling occurred up to and beyond the shoreline. A comparison of coastal maps from 1945 and 1985 suggests that the shoreline was extended by filling as much as 175 feet to the southwest of the point (National Oceanographic and Atmospheric Administration [NOAA] 1985; U.S. Coast and Geodetic Survey 1945). Data from offshore boring samples indicate that landfill materials extend up to 100 feet into the bay beyond the present shoreline. Recent remedial actions have resulted in the capping of the landfill and the installation of a stone revetment along the shoreline for erosion protection (Brown and Root Environmental 1998).

The limits of the McAllister Point site consist of a rectangular area extending from the Coddington Cove breakwater north approximately one mile, and offshore for a distance of one-half mile (see Figure 1). The limits of this rectangular area were established solely for the purposes of this study to include any foreseeable areas of disturbance.

B. Coddington Cove

Coddington Cove is formed by and lies on the north side of Coddington Point. The Coddington Cove breakwater, constructed in 1959, now defines the northern limit of the cove (see Figure 1). From World War II to the present, the cove has been the site of intensive naval and commercial marine uses which have resulted in the possible contamination of the cove sediments (Brown and Root Environmental 1997; Science Applications International Corporation and University of Rhode Island 1997). Most of the cove's waters and shoreline have been altered and developed by the Navy, with pier, wharf, and bulkhead construction and associated filling and dredging. The cove shoreline remained undeveloped prior to the Navy's occupation of the site in 1940 (U.S. Naval Training Station, Newport, Rhode Island 1940).

The Coddington Cove study area is bounded on the east by the shoreline, on the south by Coddington Point, on the north by the Coddington Cove breakwater, and on the west by a line from the end of the breakwater to the western tip of Coddington Point. The area measures roughly 6,000 feet by 3,000 feet, comprising about 400 acres (see Figure 1).

C. Coasters Harbor

Coasters Harbor is located between the north end of Coasters Harbor Island and Coddington Point. The shoreline within the study area has remained undeveloped and essentially within its historical boundaries, with minor exceptions. Rock or other coarse material has been dumped along much of the shoreline on both sides of the harbor to reduce erosion. During World War I the Navy built a pile causeway over the shallows between Coddington Point and a large offshore rock situated due west of the point known as Bishop Rock. A coaling pier, which projected due south from the rock, was also constructed at that time. A bridge connected Coasters Harbor Island to Coddington Point a short distance north of the present bridge (U.S. Naval Training Station, Newport, Rhode Island 1919). During or after World War II, the pier was removed and the pile causeway was replaced with a solid fill causeway (U.S. Naval Training Station, Newport, Rhode Island 1940). A natural channel as deep as nine feet in the center of the harbor allows shallow draft vessels to navigate as far as the bridge (NOAA 1985). The north end of Coasters Harbor Island was the site of a Navy Fire Fighting Training Area between 1943 and 1972. Some of the fuel oil that was used in fire simulations at the facility escaped into the surrounding environment (TRC Environmental Corporation 1994).

The study area, comprising approximately 72 acres, is bounded on the southeast by Coasters Harbor Island's north bridge, and on the west by a line from Bishop Rock to the westernmost point of the island (see Figure 1).

III. Literature and Information Search Methods

The literature and information search focused on library and on-line digital library sources, government collections, and oral interviews with individuals knowledgeable in the underwater archaeology of Narragansett Bay.

A. Library and Electronic Library Sources

The collections of the following area libraries were searched for primary and secondary documentary materials relevant to underwater archaeology in Narragansett Bay: the Newport Historical Society Library, Newport Public Library, and Naval War College Library, Newport; the Pell Marine Sciences Library at the University of Rhode Island, North Kingston; Brown University's Rockefeller Library, John Carter Brown Library, and Sciences Library, and the Providence Public Library, Providence; the Library of Congress, Washington, D.C.; and the National Archives and Records Administration, College Park, Maryland.

An on-line search of digital library sources included the U.S. Naval Historical Center Underwater Archaeology Branch web page and on-line bibliographies; the databases of the Online Computer Library Center, Inc., using the First Search program; and the manuscript and library holdings of the National Maritime Museum in Greenwich, England.

B. Government Sources

U.S. Navy facility plans, dredging records, and reports pertaining to the three study areas were examined at the Public Works office of the Naval Education and Training Center.

Dredging records for Narragansett Bay, Newport, and vicinity, provided by the U.S. Army Corps of Engineers New England District, were reviewed (U.S. Army Corps of Engineers 1998).

The offices of the Rhode Island Historical Preservation and Heritage Commission, Providence, were visited to obtain information on known or documented underwater historical resources in the project areas.

C. Interviews

The following individuals with specialized knowledge on shipwrecks and underwater archaeology in Narragansett Bay were contacted and interviewed:

Dr. D.K. Abbass, Project Director, Rhode Island Marine Archaeology Project (RIMAP), Newport.

Robert Cembrola, Curator of the Naval War College Museum, Newport, Rhode Island, and underwater archaeologist.

Albert P. Davis, Exxon Corporation, New Orleans. Discoverer of three Revolutionary War British frigate shipwrecks in Narragansett Bay.

Frederick Lamoureux, Former Facilities Manager (retired), Naval Underwater Warfare (Systems) Center, Swansea, Massachusetts.

Charlotte Taylor, Staff Underwater Archaeologist, Rhode Island Historical Preservation and Heritage Commission, Providence.

IV. Discussion of Background Literature

A. Documented Historic Resources in Project Areas

The Rhode Island Historical Preservation and Heritage Commission is charged with the responsibility of locating and protecting submerged historic cultural resources, including shipwrecks, located within state waters. As resources are identified, their location and boundaries are recorded on topographic maps, and files containing documentary information for each site are created. A review of those maps and files, and consultation with the state underwater archaeologist, determined that there are presently no documented or identified submerged historic cultural resources within the three project areas (Taylor 1998).

B. General Literature Overview

Primary literature on the subject of underwater archaeology in Narragansett Bay is limited to the works of Davis (1973a, 1973b, 1979), Davis et al. (1976), Cembrola (1984), Bond et al. (1990), and Abbass (1997a, 1997b, 1998a), and secondary reporting in newspapers and magazines on the work of those authors.

Between 1972 and 1974, Albert P. Davis, Jr., then a research associate at the University of Rhode Island School of Oceanography, located the wrecks of three British warships sunk during the Revolutionary War along the western shore of Aquidneck Island (Davis 1973b:1-2; Davis et al. 1976:3, 4). The wreck sites of the HMS *Cerberus*, HMS *Lark*, and HMS *Orpheus*, which all lie north and outside of the project study areas, have since been listed in the National Register of Historic Places (Davis 1973a; Taylor 1998). The three frigates, and a fourth, the HMS *Juno*, were

intentionally run aground, burned, and sunk by the British on August 5, 1778, during a siege of British-occupied Rhode Island by a fleet of French warships under the command of Count d'Estaing (Des Barres 1781).

Robert Cembrola worked with Davis and later reported on artifacts recovered from the *Orpheus*, which, as has already been mentioned, lies outside the study areas (Cembrola 1984).

In 1990, K. Bond, J. Carolan, M. Roberts, and L. Smith submitted to the City of Newport Planning Department a report entitled *A Plan for the Preservation, Protection and Management of the Underwater Historic and Archaeological Resources of Newport Harbor, Rhode Island* (Bond et al. 1990). The plan does not deal with resources within the study areas.

Dr. D.K. Abbass, Director of the Rhode Island Marine Archaeology Project (RIMAP), a nonprofit group, has been documenting underwater archaeological resources in the Newport area of Narragansett Bay since 1992. RIMAP is supported in part by state and federal grant monies, and detailed quarterly and annual reports of the project's findings are on file at Newport City Hall and elsewhere. RIMAP publications to date do not include information on specific resources located within the study areas. Abbass has reported on the status of the sunken British Revolutionary War fleet in Narragansett Bay (Abbass 1997b), and is currently conducting research on the history and location of the frigate *Juno*. RIMAP's and Abbass's efforts to date are discussed in a later section of this report.

Historical maps of Newport and Middletown provided information for the assessment of the history of coastline development in the project areas (Abert and Vinton 1820; Beers 1870; Dripps and Tilley 1859; Elliott and Flynn 1893; Hopkins 1876, 1883; Mumford 1712; Richards 1907; Sanborn Map Company various dates; U.S. Coast and Geodetic Survey 1864; U.S. Geological Survey 1890; Walling 1855). U.S. Coast and Geodetic Survey (1945) and National Ocean Survey (National Oceanographic and Atmospheric Administration 1985) charts were examined for evidence of shipwrecks, which are plotted when they are awash or when they constitute a hazard to navigation, and for navigable channels and harbors maintained by dredging. Two other maps were found which show the locations of shipwrecks in Narragansett Bay. The 1903 map produced by the U.S. Army Corps of Engineers shows the location of 1,076 shipwrecks along the coast between Fishers Island and Cape Cod, a large number of which are concentrated in or around the mouth of Narragansett Bay (U.S. Army Corps of Engineers 1903). The 1971 map entitled *Marine Disasters of Narragansett Bay* is a commercial poster printed for sale to tourists and divers (Luther 1971). None of the above-cited maps delineate shipwrecks in or near the project areas.

C. Site-Specific Literature or Information

1. McAllister Point

No literature relating specifically to the presence or absence of underwater cultural resources within the McAllister Point study area was found. No shore-side development had occurred prior to the landfilling, nor have the waters off the point been dredged; therefore no records of that type exist. Environmental investigations and reports concerning the McAllister Point landfill, as cited in the *Feasibility Study Report for Marine Sediment/Management of Migration, McAllister Point Landfill*, by Brown and Root Environmental (1998), are believed to be the only site-specific literature of any kind for this study area.

2. Coddington Cove

Literature relating specifically to the presence or absence of underwater cultural resources within the Coddington Cove study area consists of one previous work and a work in progress by Abbass (1997b, 1998a), a 1781 British map which shows the location of the scuttled frigate *Juno* in Coddington Cove (Des Barres 1781), and Navy dredging records which delineate areas of the cove where the presence or integrity of submerged cultural resources would have been destroyed by dredging (cited below).

In 1997 Abbass presented a conference paper on her research on the scuttled British Revolutionary War fleet in which she reports that the British frigate *Juno* is "supposedly in Coddington Cove, site of a Navy base" (Abbas 1997b). RIMAP is currently conducting additional historical research on the sunken fleet with funding from the U.S. Naval Historical Center in Washington, D.C. (Abbas 1998a). Research conducted to date by Abbass which puts the location of the wreck of the *Juno* in Coddington Cove relies primarily on the diary of Captain Frederick Mackenzie, a member of the Regiment of Royal Welsh Fusiliers stationed on Rhode Island (Aquidneck Island) during the Revolutionary War. Mackenzie witnessed the scuttling and destruction of the British fleet on August 5, 1778, and recorded in his diary "the *Juno*, lying near Coddington Cove, she was set on fire also, and blew up soon after" (Mackenzie 1930:II, 329-330, cited in Abbas 1998a).

An original copy of a chart of Rhode Island and Narragansett Bay, first drawn and published by J.F.W. Des Barres for Lord Viscount Howe in 1776, was located at the Newport Historical Society. The chart was updated by Des Barres in 1781 with "Notes and references explaining the situation of the British ships and forces after the 29th of July 1778 when the French fleet under the command of Count d'Estaing appeared and anchored off the harbour" (Des Barres 1781). The key to the chart lists

each of the British ships and where they were sunk. The location of the wreck of the HMS *Juno*, labeled "c," is shown on the chart in Coddington Cove (Figure 2).

Navy Public Works dredging records for Coddington Cove indicate that the first set of soundings in Coddington Cove for the Navy were taken in July and August of 1941. The resulting hydrographic map, dated August 9, 1941, shows the limits of the soundings extending from 250 feet south of the Transit Shed Pier and breakwater at the south end of the cove, to 1,000 feet north of the Still Water Basin (under construction) and out to the 60-foot depth contour an average of 4,000 feet (west) from shore (U.S. Naval Training Station, Newport, Rhode Island, Public Works 1941).

In 1942, approximately 50 acres of the cove in front and to the sides of the recently completed Still Water Basin was dredged to 25 feet below the mean low waterline (m.l.w.) (minus 23 m.l.w. required). The dredged area extended roughly 1,000 feet to the south of the basin, 2,000 feet to the north, and out to the 25-foot depth contour, an average of 600-700 feet (west) from the face of the Still Water Basin bulkhead (Figure 3). Ten to 15 feet of sediments were removed along the inshore limit of the dredge area (U.S. Naval Operating Base, Newport, Rhode Island, Public Works 1942).

In 1954, dredging plans were prepared by the Navy in conjunction with the construction of Piers 1 and 2 at Coddington Cove. The plans show seabed elevations prior to dredging as determined by soundings performed on a 50-foot grid within 2,000 feet of previously existing shoreline, and on a 100-foot grid beyond 2,000 feet from shore. Dredging to minus 35 feet m.l.w. was performed to within 5 feet of the pier piling from 50 feet in front of the shoreline bulkhead, seaward approximately 2,700 feet to the 35-foot depth contour (see Figure 3). Water depths prior to dredging were 30 feet or less at 2,300 feet from the shore, and an average of 13 feet of bottom material was removed (U.S. Naval Supply Depot, Newport, Rhode Island 1954).

The apron bulkhead for Piers 1 and 2, which extends from 100 feet north of Pier 2 to the Transfer Pier Dock, was constructed 250 feet seaward of the original mean low waterline and backfilled. Water depth at the bulkhead averaged 13 feet prior to dredging. Dredging to minus 35 feet m.l.w. was limited to within 50 feet of the bulkhead. The bottom was sloped up to the bulkhead at the bottom material's natural angle of repose. The depth of water at the limit of dredging averaged 18 feet. Using a 2:1 angle of repose, it can be assumed that the sea bottom immediately adjacent to and extending 25 feet seaward of the bulkhead is undisturbed, unless subsequent dredging was performed in this area (U.S. Naval Supply Depot, Newport, Rhode Island 1954).

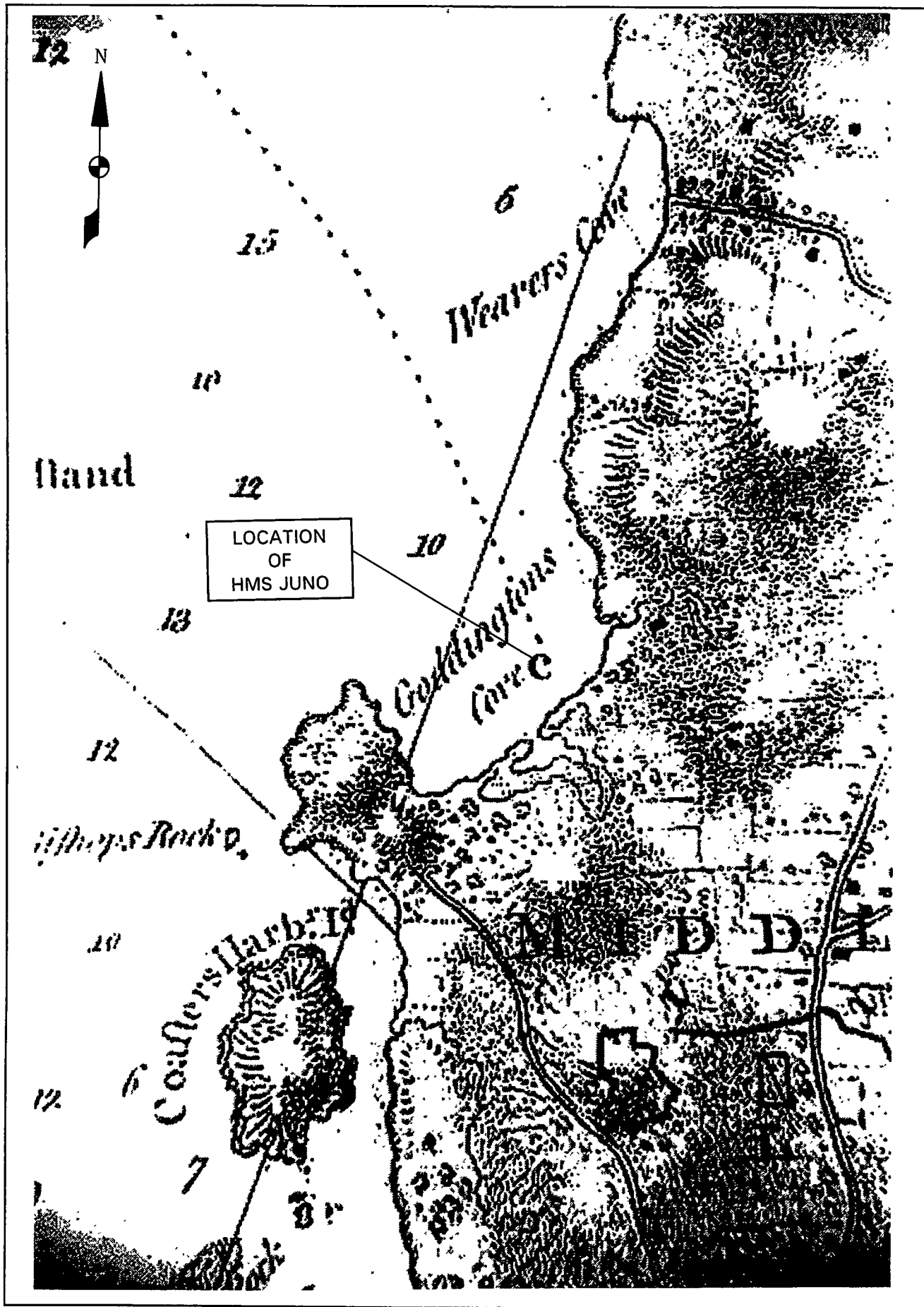


FIGURE 2: Portion of 1781 Des Barres Map Showing the Location of the Burning and Sinking of the HMS *Juno* in Coddington Cove, Indicated by the Letter "c"

SOURCE: Des Barres 1781

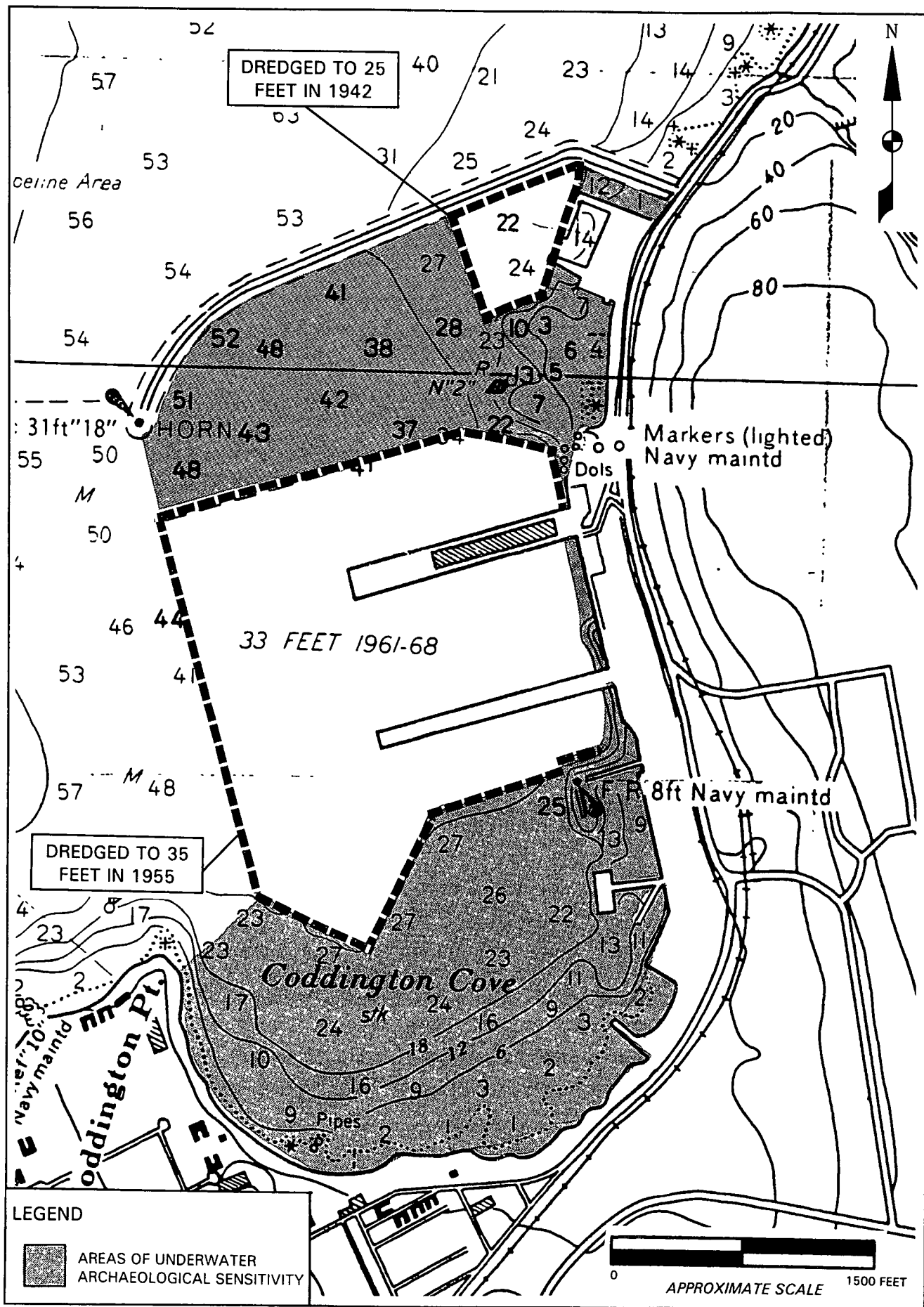


FIGURE 3: Dredged Areas of Coddington Cove

SOURCE NOAA 1985

Plans for Pier 2, built in 1958; plans for the Coddington Cove breakwater, built in 1959; and plans for the dredging of the Pier 1 and Pier 2 area, done in 1961, were examined for notes or other information which might indicate bottom conditions or obstructions encountered during construction (see Figure 3) (U.S. Department of the Navy, Bureau of Yards and Docks 1959, 1962). A chart of detailed soundings of the cove taken by the U.S. Army Corps of Engineers for the Navy in 1986 was similarly reviewed (U.S. Army Corps of Engineers 1986). None of these plans contained pertinent information.

3. Coasters Harbor

No literature relating specifically to the presence or absence of underwater cultural resources in the Coasters Harbor study area was found. The area has not been dredged, and therefore no records of that type exist. U.S. Navy maps showing conditions at the Training Station around Coddington Point and Coasters Harbor Island provided information on shoreline development, described in Section II, above (U.S. Naval Training Station, Newport, Rhode Island 1919, 1940). Recent environmental investigations and reports concerning the former Navy Fire Fighting Training Area were also reviewed, but they contained no information suggesting the presence of underwater historic cultural resources (TRC Environmental Corporation 1994). Abbass has recently suggested in correspondence that Coasters Harbor was where "slaves were off-loaded from deeper draft vessels onto shallow draft vessels to bring them ashore" (Abbass 1998b, see Appendix A). A review of published sources on the history of slavery in Newport cited in *African Americans in Newport*, published by the Rhode Island Historical Preservation and Heritage Commission in 1995, failed to find documentary support for the claim (Youngken 1995). Abbass also knows of no documentary sources for the claim and she believes it to be "lore"; it was passed on to her in conversation (Abbass 1998c). Youngken considers it unlikely that slaves were transferred to smaller vessels, for the following reasons: vessels of all sizes tied directly to the piers and wharves in Newport Harbor; the limited number of slaves brought into Newport were quarantined in a "holding pen" on Long Wharf; and, finally, there was no need to "smuggle" slaves in small boats to land at undeveloped sections of shoreline (Youngken, personal communication 1998).

V. Evaluation of Literature and Information

A. McAllister Point

Research efforts failed to find literature or information suggesting that underwater cultural resources exist in the McAllister Point study area.

B. Coddington Cove

Two documents, the diary of Frederick Mackenzie as cited by Abbass (1998a) and the 1781 Des Barres chart, indicate that the British frigate HMS *Juno* was sunk in Coddington Cove on August 5, 1778. Davis reports that he found the Des Barres map to be highly accurate based on the fact that the actual locations of the wrecks of the other three British frigates which he found matched within 100 yards of the locations plotted by Des Barres (Davis, personal communication 1998). No information was found that would suggest that the *Juno* has been previously found, salvaged, or disturbed by dredging or construction in the cove.

Navy records indicate that the entire middle portion of the cove around Piers 1 and 2, an area of roughly 160 acres, has been dredged to minus 35 feet m.l.w. (see Figure 3). A previous study of the dredging history of Coddington Cove was conducted by Louis Berger & Associates, Inc. (Berger), for the Rhode Island Department of Transportation in conjunction with the Newport Marine Facilities site evaluation study (Berger 1997). The Berger report concluded that dredging projects associated with the construction of Piers 1 and 2 had resulted in extensive disturbance and removal of bottom sediments and that no further underwater archaeological survey was necessary at the Pier 1 location. The Rhode Island Historical Preservation and Heritage Commission concurred with that finding in a letter to the Rhode Island Department of Transportation on December 3, 1996 (Sanderson 1996) (see Appendix B).

Records indicate that 10 to 15 feet of sediments over an area of approximately 50 acres at the north end of the cove were removed by dredging to minus 25 feet m.l.w. in conjunction with the construction of Still Water Basin in 1942 (see Figure 3). This activity would have effectively destroyed the integrity of any submerged archaeological resources within this area.

The southernmost section of cove shoreline, from the south end of the Transit Shed Pier bulkhead to the tip of Coddington Point, and a short section of shore between Still Water Basin and the breakwater, are the only sections of shoreline that have not been bulkheaded and/or filled (see Figure 3). A 25-foot-wide strip of cove bottom along the front of the shoreline bulkhead built with Piers 1 and 2 also appears from dredging records to be undisturbed.

An overlay of the historic coastline of Coddington Cove, as shown on the 1781 Des Barres map, with the current nautical chart showing conditions today suggests that the *Juno* may be located in the southern, undredged section of the cove (Figure 4).

C. Coasters Harbor

Research efforts failed to find literature or information suggesting that underwater cultural resources exist in the Coasters Harbor study area.

VI. Conclusions

A. McAllister Point

Based on the absence of any documentary evidence suggesting the existence of submerged cultural resources within the McAllister Point study area, no further study is recommended.

B. Coddington Cove

Research indicates the possibility that HMS *Juno* lies within the undisturbed sediments in Coddington Cove. Prior to the disturbance of these (previously undisturbed) sediments, underwater archaeological survey of the areas to be disturbed must be conducted. These areas are defined as: (1) from the Coddington Cove breakwater south to Still Water Basin; (2) from the southern edge of the dredged turning basin south to Coddington Point, west to the 30-foot depth contour; and (3) along the front of the shoreline bulkhead out a distance of 25 feet. These areas are delineated in Figure 3.

C. Coasters Harbor

Based on the absence of any documentary evidence suggesting the existence of submerged cultural resources within Coasters Harbor, no further study is recommended.

VII. References Cited

Abbass, D.K.

1997a *The Rhode Island Marine Archaeology Project: Report for the Year 1994.* Rhode Island Marine Archaeology Project, Newport, Rhode Island.

1997b *The Rhode Island Revolutionary War Fleet: 1778-1996.* Unpublished ms. provided by author, Newport, Rhode Island.

1998a *HMS Juno - Her History in Rhode Island.* In *Draft Report to the Naval Historical Center, Submerged Cultural Resources in Rhode Island.* Prepared for the Naval Historical Center, Washington, D.C.

1998b Letter to Richard M. Casella dated July 22, 1998. (See Appendix A.)

1998c Personal communication. Project Director, Rhode Island Marine Archaeology Project (RIMAP), Newport. Conversation with Richard M. Casella, Senior Architectural Historian, Berger, August 11.

Abert, J.J., and J.R. Vinton

1820 *Plan of Part of Rhode Island About 3 Miles North of Newport.* Surveyed by Maj. J.J. Abert and drawn by Lieut. J.R. Vinton, U.S. Topographic Bureau. On file, National Archives and Records Administration, College Park, Maryland.

Beers, D.G.

1870 *Atlas of the State of Rhode Island and Providence Plantations.* D.G. Beers & Co., Philadelphia.

Berger (see Louis Berger & Associates, Inc.)

Bond, Kathleen, Jane Carolan, Michael Roberts, Leith Smith

1990 *A Plan for the Preservation, Protection, and Management of the Underwater Historic and Archaeological Resources of Newport Harbor, Rhode Island.* Timelines, Groton, Massachusetts.

Brown and Root Environmental

1997 *Site Assessment Screening Evaluation Report. Former Robert E. Dereecktor Shipyard, Naval Education and Training Center, Newport, Rhode Island.* Submitted to U.S. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Lester, Pennsylvania. Brown and Root Environmental, King of Prussia, Pennsylvania.

1998 *Feasibility Study Report for Marine Sediment/Management of Migration, McAllister Point Landfill, Naval Education and Training Center, Newport, Rhode Island.* Submitted to U.S. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Lester, Pennsylvania. Brown and Root Environmental, King of Prussia, Pennsylvania.

Cembrola, Robert

1984 Time Capsules, The Orpheus and the Defence. In: *Unearthing New England's Past: The Ceramic Evidence*. Museum of Our National Heritage, Lexington, Massachusetts.

1995 British Transport Ships Scuttled. In: *Rhode Island Adventure Diving II*. Edited and published by Marlene and Don Snyder, Westfield, Massachusetts, pp. 78-81.

1998 Personal communication. Curator of the Naval War College Museum, Newport, Rhode Island, and underwater archaeologist. Conversation with Richard M. Casella, Berger Senior Architectural Historian, August 6.

Dame, William, and A.J. Ward

1870 *Map of Newport & Vicinity or Rhode Island*. Originally published 1860 by M. Dripps, New York. Revised and published by William Dame and A.J. Ward, Newport, Rhode Island.

Davis, Albert P., Jr.

1973a *National Register of Historic Places Inventory-Nomination Form: Wreck Sites of H.M.S. Cerberus and H.M.S. Lark*. On file, Rhode Island Historical Preservation and Heritage Commission, Providence.

1973b Divers Find British Warships Frightened by French in Narragansett Bay in 1778. *Maritimes* 17(4):1-3.

1998 Personal communication. Albert P. Davis, Exxon Corporation, New Orleans. Discoverer of three Revolutionary War British frigate shipwrecks in Narragansett Bay. Conversation with Richard M. Casella, Berger Senior Architectural Historian, August 7.

Davis, Albert P., Jr., Foster H. Middleton, Bradley M. Alton

1976 *University of Rhode Island Underwater Bicentennial Expedition*. Department of Ocean Engineering, University of Rhode Island, Kingston. On file, Rhode Island Historical Preservation and Heritage Commission, Providence.

Des Barres, J.F.W.

- 1781 *A Chart of the Harbour of Rhode Island and Narragansett Bay, Surveyed in Pursuance of Directives from the Lords of Trade to His Majesty's Surveyor general for the Northern District of North America. Published at the Request of the Right Honourable Lord Viscount Howe, by J. F. W. Des Barres Esq., 20 July 1776.* Reprint of original, published by J. F. W. Des Barres Esq., November 1, 1781, in collection of Newport Historical Society, Newport, Rhode Island.

Downing, Antoinette F., and Vincent J. Scully

- 1967 *The Architectural Heritage of Newport, Rhode Island, 1640-1915.* Bramhall House, New York.

Dripps, M., and B. Tilley

- 1859 *Map of the City of Newport, Rhode Island.* Published by M. Dripps, New York, and B. Tilley, Newport, Rhode Island. Copy at the Newport Historical Society, Newport, Rhode Island.

Elliott, Charles L., and Thomas Flynn

- 1893 *Atlas of the City of Newport, Rhode Island.* L.J. Richards & Co., Springfield, Massachusetts.

Hopkins, G.M.

- 1876 *City Atlas of Newport, Rhode Island.* G.M. Hopkins, Philadelphia.

- 1883 *Atlas of the City of Newport, Rhode Island.* G.M. Hopkins, Philadelphia.

Louis Berger & Associates, Inc. [Berger]

- 1997 *Newport Marine Facilities Historical Research Report.* Prepared for the Rhode Island Department of Transportation by the Cultural Resource Group, Louis Berger & Associates, Inc., Needham, Massachusetts.

Luther, B.W.

- 1971 *Marine Disasters of Narragansett Bay.* Published by Peter J. Closson, Sandwich, Massachusetts.

Mackenzie, Frederick

- 1930 *The Diary of Frederick Mackenzie, Giving a Daily Narrative of His Military Service as an Officer of the Regiment of Royal Welsh Fusiliers during the Years 1775-1781 in Massachusetts, Rhode Island and New York.* 2 vols. Harvard University Press, Cambridge, Massachusetts.

Mumford, John

1712 *Map of Newport*. Redrawn 1951 by Marian Stickney and reproduced in Downing and Scully 1967.

National Oceanographic and Atmospheric Administration [NOAA]

1985 *Narragansett Bay Including Newport Harbor*. National Ocean Survey Chart 13223. National Oceanographic and Atmospheric Administration, Washington, D.C.

Richards, L.J.

1907 *Atlas of Newport*. L. J. Richards Co., Publishers, Springfield, Massachusetts.

Sanborn Map Company

various *Atlas of Newport, Rhode Island*, for the years 1884, 1891, 1896, 1903, 1921. Sanborn Map Company, New York.

Sanderson, Edward F.

1996 Letter to J. Michael Bennett, Rhode Island Department of Transportation, December 3.

Science Applications International Corporation and University of Rhode Island

1997 *Derecktor Shipyard Marine Ecological Risk Assessment Report*. Prepared for Department of the Navy, Northern Division Naval Facilities Engineering Command, Lester, Pennsylvania. Science Applications International Corporation, Narragansett, Rhode Island.

Taylor, Charlotte

1998 Personal communication. Rhode Island State Underwater Archaeologist, Rhode Island Historical Preservation and Heritage Commission, Providence. Conversation with Richard M. Casella, Berger Senior Architectural Historian, July 28.

TRC Environmental Corporation

1994 *Old Fire Fighting Training Area Remedial Investigation Report: Technical Report, Naval Education and Training Center, Newport, Rhode Island. Volume I, Draft Final, U.S. Department of the Navy Installation Restoration Program*. Prepared for the U.S. Department of the Navy, Northern Division, Naval Facilities Engineering Command, Lester, Pennsylvania. TRC Environmental Corporation, Windsor, Connecticut.

U. S. Army Corps of Engineers

1903 *Coast from Fishers Island, Connecticut, to Cape Cod, Massachusetts, Showing the Approximate Location of the Occurrence of 1076 Marine Disasters up to 1903*. U.S. Army Corps of Engineers, Newport, Rhode Island. On file, Pell Library map archive, University of Rhode Island, Kingston.

1986 Naval Base, Newport, Rhode Island, Coddington Cove. Four sheets of soundings: Naval Education and Training Center drawings 26043-260, 26044-260, 26045-260, 26046-260. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

1998 Computer printout of all dredging projects for which Army Corps permits were issued. Provided by S. DiLorenzo, U.S. Army Corps of Engineers, New England District Regulatory Branch, Concord, Massachusetts.

U.S. Coast and Geodetic Survey

1864 *Newport Harbor and Approaches*. U.S. Coast and Geodetic Survey, Washington, D.C.

1945 *Narragansett Bay Including Newport Harbor*. Chart No. 236. U.S. Coast and Geodetic Survey, Washington, D.C.

U.S. Department of the Navy, Bureau of Yards and Docks

1959 *Breakwater*. Naval Education and Training Center Drawing No. 14217149. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

1962 *Dredging Pier 1 and 2 Area*. Naval Education and Training Center Drawing No. 15259159. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

U.S. Geological Survey [USGS]

1890 *Prudence Island, R.I., Quadrangle*. 7.5-minute Series (Topographic). U.S. Geological Survey, Department of the Interior, Washington, D.C.

U.S. Naval Operating Base, Newport, Rhode Island, Public Works

1942 *Narragansett Bay, R.I., North of Coddington Point, Examination After Dredging, 23 Foot Area*. Public Works Drawing No. 5936-66, dated October 9, 1942. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

U.S. Naval Supply Depot, Newport, Rhode Island

1954 *Fleet Berthing Facilities Sounding and Dredging Plan*. Drawing No. 627050, dated April 6, 1954. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

U.S. Naval Training Station, Newport, Rhode Island

1919 *Map of U.S. Naval Training Station, Newport, RI, Coasters Harbor Island and Coddington Point, Showing Conditions on June 30, 1919*. On file, Naval Historical Collections, Naval War College, Newport, Rhode Island.

1940 *Map of U.S. Naval Training Station, Newport, RI, Coasters Harbor Island and Coddington Point, Showing Conditions on June 30, 1940.* On file, Naval Historical Collections, Naval War College, Newport, Rhode Island.

U.S. Naval Training Station, Newport, Rhode Island, Public Works

1941 *Hydrographic Map, Narragansett Bay, R.I., Coddington Cove.* Public Works Drawing No. 3516-43, dated August 9, 1941. On file, Naval Education and Training Center, Public Works Office, Newport, Rhode Island.

Walling, Henry F.

1855 *Map of the State of Rhode Island and Providence Plantations.* L.H. Bradford & Co., Lithographers, Boston.

Youngken, Richard C.

1995 *African Americans in Newport.* Rhode Island Historical Preservation and Heritage Commission, Providence, Rhode Island

1998 Personal communication. Preservation Planner, Newport Collaborative, Newport, Rhode Island. Conversation with Richard M. Casella, Berger Senior Architectural Historian, August 13.

VIII. Preparers

This report was prepared by the Cultural Resource Group of Louis Berger & Associates, Inc., as subconsultant to Maguire Group Connecticut, Inc., under NAVFAC Contract N62472-97-D-1390. The research was conducted and the report written by Berger Senior Architectural Historian Richard M. Casella. Martha H. Bowers, Principal Architectural Historian, served as Berger's project manager.

IX. Appendices

- A.** Letter from D. K. Abbass to Richard M. Casella, Louis Berger & Associates, Inc., dated July 22, 1998.
- B.** Letter from T. Sanderson, Rhode Island Historical Preservation and Heritage Commission, to J. Michael Bennett, Rhode Island Department of Transportation, dated December 3, 1996.

Appendix A

**RHODE ISLAND MARINE
ARCHAEOLOGY PROJECT**

Box 1492

Newport, RI 02840

401-847-8951

e-mail: at883@osfn.org

July 22, 1998

Mr. Richard M. Casella
490 Water Street
Portsmouth, RI 02871

Dear Mr. Casella:

Enclosed please find a copy of the portion of my report to the Navy Historical Center that describes the history of HMS JUNO, the British frigate lost in 1778. Please note that you should credit the NHC and the Legacy program as the funding agencies for my work.

Given the historical description of HMS JUNO's loss, and given our work on two of the other frigates sunk under the same circumstances but farther up the shore, she could be anywhere along the eastern shore of Coddington Cove, including the Derektor Shipyard area and possibly as far north as McAllister Point.

The area offshore from the Fire Fighter Trainer might also contain historic cultural materials. Narragansett Bay traditionally has been used as a trash and other waste dump, so any waters around a large facility such as the Naval complex at Newport are likely to contain Naval materials that may have historical interest.

In addition, the channel between the north end of Coaster's Harbour Island and Aquidneck Island gave access to a small stream that led to the Malbone estate. This channel was where slaves were off-loaded from the deeper draft vessels onto shallow draft vessels to bring them ashore. The waters off the Fire Fighter Trainer may hold miscellaneous cultural artifacts related not only to the Naval presence in the area, but to the history of slavery in Newport.

Abbass/Casella
July 21, 1998
Page 2

My recommendations to the Navy will be:

(1) To locate HMS JUNO we need to re-evaluate the side scan and core sample data already in Navy hands for the presence of cultural materials at Derektor and McAllister Point. I called for that in a paper delivered at the 1997 annual meeting of the Society for Historical Archaeology (copy also enclosed), and have begun this process. A sub-bottom profile may not tell much about the near shore due to the potential for false positives and should probably be used only after the site is found, but a mag run may be useful.

(2) The Navy also needs to consider the possibility that some of the materials found in and around the McAllister landfill itself may be historically significant. Urban sociologists and archaeologists now use "garbage" to study modern cultural patterns, and archaeologists traditionally have used middens (trash heaps) in the study of pre-historic peoples.

(3) The possibility of historical cultural materials in the channel off the Fire Fighter Trainer should not be discounted. Therefore, any dredging or construction in those waters should be done carefully, and with archaeological oversight in case such materials are found.

If you have any questions, please don't hesitate to contact me directly.

Sincerely,

D. K. Abbass, Ph.D.
Project Director

cc: Charlotte Taylor, RI Historical Preservation Commission
Robert Neyland, Ph.D., Naval Historical Center
Jim Shafer, NorthDiv
Kimberlee Keckler, EPA
Martha Bowers, Project Manager, Louis Berger & Associates

Visit the RIMAP web site at:
<http://home.ici.net/~hoagla/rimap/index.html>

Appendix B



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
HISTORICAL PRESERVATION & HERITAGE COMMISSION

Old State House • 150 Benefit Street • Providence, R.I. 02903-1209

Preservation (401) 277-2678
Heritage (401) 277-2669

FAX (401) 277-2968
TDD (401) 277-3700

December 3, 1996

Mr. J. Michael Bennett
Chief Civil Engineer - Road Design
RIDOT/Division of Public Works
State Office Building
Providence, Rhode Island 02903

Re: Phase I Archaeological Surveys
Newport Marine Facilities

Dear Mr. Bennett:

The Rhode Island Historical Preservation and Heritage Commission staff has reviewed the work program for the marine and terrestrial archaeological survey work proposed for the alternative sites in the Newport Marine Facilities. We have also received some additional information on the limits of the proposed terrestrial locations from Louis Berger and Associates. We have the following comments.

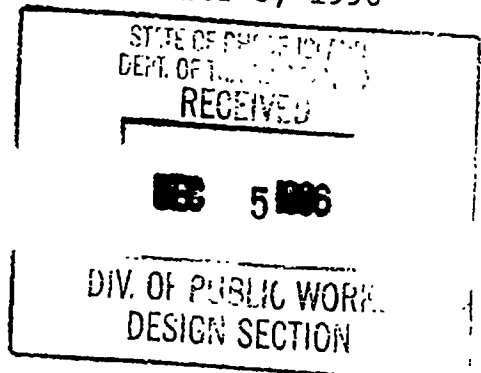
Marine

The RIHP&HC has reviewed the assessment of sea bottom disturbance provided by Louis Berger & Associates. This assessment indicates that the Navy Pier 1, Melville Pier, and American Shipyard locations have been extensively disturbed. No further underwater archaeological survey is necessary in these locations. Due to the small size of the proposed projects at the Fort Adams site and the Long Wharf site and the limited underwater impacts of the options, no further underwater survey is necessary there either.

However, the possibility that significant submerged cultural resources are present to the west of Goat Island remains. We have examined the Phase I proposal prepared by Warren Riess to conduct a survey of this project area, and find that the scope of work as specified adequately addresses our concerns.

Terrestrial

Based upon our review of the more detailed location maps provided by Louis Berger and Associates we have concluded that no archaeological work is needed at Goat Island, Melville Marine or Navy Pier 1. For the remaining sites, Fort Adams, Long Wharf and



Mr. J. Michael Bennett

2

December 3, 1996

American Shipyard, the archaeologists should prepare background research reports to help establish site sensitivity and potential integrity. Following our review of these reports we would then determine what level of Phase I Testing would be most appropriate at each location.

These comments are provided in accordance with Section 106 of the National Historic Preservation Act. If you have any questions or comments, please contact Richard E. Greenwood, Project Review Coordinator for this office.

Very truly yours,



27) Edward F. Sanderson
Executive Director
Deputy State Historic
Preservation Officer

cc: Michael Hebert, RIDOT
Marty Bowers, Louis Berger & Associates

(0:35)